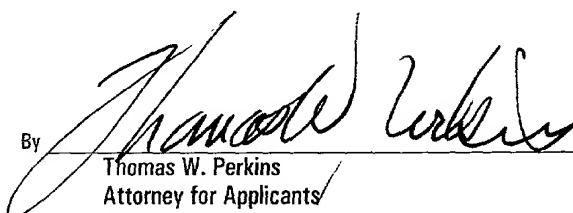


FORM PTO-1390 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER: 53920-64133 U.S. APP. NO. (if known, see 37 CFR 1.51) 09/856299
INTERNATIONAL APPLICATION NO.: PCT/SE99/02086	INTERNATIONAL FILING DATE: 15 November 1999	PRIORITY DATE CLAIMED: 20 November 1998
TITLE OF INVENTION: ABSORBENT PRODUCT WITH ARCUATE LONGSIDES OF END PORTION		
APPLICANT(S) FOR DO/EO/US: Solgun DREVIK and Gunnar CASTMO		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/>	This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.	
2. <input type="checkbox"/>	This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.	
3. <input checked="" type="checkbox"/>	This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).	
4. <input checked="" type="checkbox"/>	A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.	
5. <input checked="" type="checkbox"/>	A copy of the International Application as filed (35 U.S.C. 371(c)(2))	
6. <input type="checkbox"/>	a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).	
7. <input type="checkbox"/>	b. <input type="checkbox"/> has been transmitted by the International Bureau. (see attached copy of PCT/IB/308)	
8. <input type="checkbox"/>	c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).	
9. <input type="checkbox"/>	A translation of the International Application into English (35 U.S.C. 371(c)(2)).	
10. <input type="checkbox"/>	Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).	
11. <input type="checkbox"/>	a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).	
12. <input type="checkbox"/>	b. <input type="checkbox"/> have been transmitted by the International Bureau.	
13. <input type="checkbox"/>	c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.	
14. <input type="checkbox"/>	d. <input type="checkbox"/> have not been made and will not be made.	
15. <input type="checkbox"/>	A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).	
16. <input type="checkbox"/>	An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).	
17. <input type="checkbox"/>	A translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).	
Item 11. to 16. below concern document(s) or information included:		
11. <input checked="" type="checkbox"/>	An Information Disclosure Statement under 37 CFR 1.97 and 1.98.	
12. <input type="checkbox"/>	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.	
13. <input checked="" type="checkbox"/>	A FIRST preliminary amendment.	
14. <input type="checkbox"/>	A SECOND or SUBSEQUENT preliminary amendment.	
15. <input type="checkbox"/>	A substitute specification.	
16. <input type="checkbox"/>	A change of power of attorney and/or address letter.	
17. <input checked="" type="checkbox"/>	Other items or information:	
International Preliminary Examination Report (PCT/IPEA/409) International Search Report (PCT/ISA/210) Abstract on a separate sheet Application Data Sheet		

U.S. APPLICATION NO. (if known, fill in 37 CFR 1.51) 097/856299		INTERNATIONAL APPLICATION NO. PCT/SE99/02086		ATTORNEY'S DOCKET NO. 53920-64133	
17. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$ 1,000.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$ 860.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$ 710.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$ 690.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$ 100.00 <div style="text-align: right;">ENTER APPROPRIATE BASIC FEE AMOUNT =</div>				CALCULATIONS PTO USE ONLY	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	130.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	8 - 20 =	0	X \$18.00	\$	
Independent claims	1 - 3 =	0	X \$80.00	\$	
MULTIPLE DEPENDENT CLAIMS(S) (if applicable)			+ \$270.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$	1,130.00
Reduction of 1/2 for filing by small entity, if applicable. Applicant claims Small Entity Status under 37 CFR 1.27. +				\$	
SUBTOTAL =				\$	1,130.00
Processing fee of \$130 for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.49(f)).				\$	
TOTAL NATIONAL FEE =				\$	1,130.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
TOTAL FEES ENCLOSED =				\$	1,130.00
				Amount to be refunded:	
				charged:	
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>1,130.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 25-0120 in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required by 37 CFR 1.16 and 1.17, or credit any overpayment to Deposit Account No. 25-0120 . A duplicate copy of this sheet is enclosed.					
SEND ALL CORRESPONDENCE TO: Customer No. 000466 YOUNG & THOMPSON 745 South 23rd Street 2nd Floor Arlington, VA 22202 (703) 521-2297 facsimile (703) 685-0573					
			May 21, 2001	By  Thomas W. Perkins Attorney for Applicants Registration No. 33,027	

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Solgun DREVIK et al.

Serial No. (unknown)

Filed herewith

ABSORBENT PRODUCT WITH
ARCUATE LONGSIDES
OF END PORTION

PRELIMINARY AMENDMENT

Commissioner for Patents

Washington, D.C. 20231

Sir:

Prior to the first Official Action and calculation of the filing fee, please substitute Claims 1-7 as originally filed, which appear on pages 11 and 12, with Claims 1-6 as filed in the Article 34 amendment of 31 October 2000. The pages containing Article 34 Claims 1-6 are marked "AMENDED SHEET" and are attached hereto. Following the insertion of Claims 1-6, please amend these claims as follows:

IN THE CLAIMS:

Amend claim as follows:

--4. (Amended) Absorbent product according to claim 1, characterized in that the length of the product (1; 18) 150 mm or smaller.--

Amend claim as follows:

--5. (Amended) Absorbent product according to claim 1, characterized in that the lower side (11) of the product is

fitted with fastening means (15', 15a, 15b, 15c), which extend in a strip-shaped manner in the longitudinal direction of the product parallel with its longitudinal center line (8).--

Add the following new claims:

--7. (New) Absorbent product according to claim 2, characterized in that the length of the product (1; 18) 150 mm or smaller.

--8. (New) Absorbent product according to claim 7, characterized in that the lower side (11) of the product is fitted with fastening means (15', 15a, 15b, 15c), which extend in a strip-shaped manner in the longitudinal direction of the product parallel with its longitudinal center line (8).--

R E M A R K S

The above changes in the claims merely place this national phase application in the same condition as it was during Chapter II of the international phase, with the multiple dependencies being removed. Following entry of this amendment by substitution of the pages, only Article 34 claims 1-6 and new claims 7 and 8 remain pending in this application.

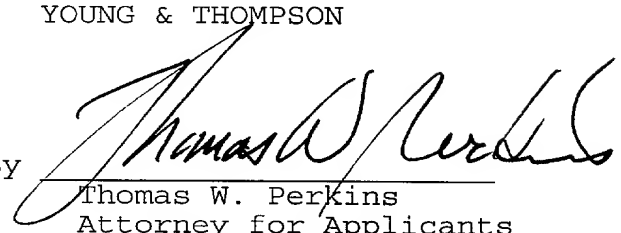
Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

Solgun DREVIK et al. - Docket No. 53920-64133

Respectfully submitted,

YOUNG & THOMPSON

By

A handwritten signature in black ink, appearing to read "Thomas W. Perkins", is written over a horizontal line.

Thomas W. Perkins
Attorney for Applicants
Registration No. 33,027
Customer No. 00466
745 South 23rd Street
Arlington, VA 22202
Telephone: 703/521-2297

May 21, 2001

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Amend claim as follows:

--4. (Amended) Absorbent product according to ~~any one of Claims 1-3~~, characterized in that the length of the product (1; 18) 150 mm or smaller.--

Amend claim as follows:

--5. (Amended) Absorbent product according to ~~any one of Claims 1-4~~, characterized in that the lower side (11) of the product is fitted with fastening means (15', 15a, 15b, 15c), which extend in a strip-shaped manner in the longitudinal direction of the product parallel with its longitudinal ~~centre~~center line (8).--

ABSTRACT OF THE DISCLOSURE

Absorbent product (1), such as a sanitary towel, incontinence protection or protection for briefs, which product has an essentially elongate shape with a longitudinal direction (8) and a transverse direction (9), an upper side (10) and a lower side (11), and has a first end portion (6) intended to face forwards on the wearer and a second end portion (7) intended to face backwards on the wearer, which product is characterized in that the width of the second end portion (7) of the product is 40 mm maximum, and in that the long sides (2, 3) of this end portion (7) are essentially arcuate.

ABSORBENT PRODUCT WITH ARCUATE LONGSIDES OF END PORTION**5 Field of technology**

Absorbent product such as a sanitary towel, incontinence protection or protection for briefs, which product has an essentially elongate shape with a longitudinal direction and a transverse direction, an upper side and a lower side, and has a first end portion intended to face forwards on the wearer and a second
10 end portion intended to face backwards on the wearer.

Background

Conventional absorbent products of the above-mentioned types usually have a rectangular or hour-glass appearance.

15

One problem associated with these shapes of absorbent product is the increasing use of string briefs. A product of rectangular or hour-glass form will protrude beyond the edges of the string briefs and spoil somewhat the elegance which is the whole point of wearing this type of underwear. The alternative is to make the
20 product sufficiently narrow so that the entire product width will be contained within the confines of the narrowest part of the string briefs. The absorption capacity of a product made in this way will however be very limited.

It has therefore been proposed to design the absorbent products with a narrower
25 part and a wider part. See for example US 5 713 886, US 5 729 835 and WO 97/39713.

WO97/39713 describes a sanitary towel with one end having a tapered three-dimensional form, and a second plane end with a straight form. One problem
30 connected with the sanitary towel described in WO97/39713 is that no guidance

is provided as to the dimensions required to make this a discreet product.

Another problem with a product according to WO97/39713 is that the absorbent product has an end with straight form, which is also unsatisfactory from the

5 discretion point of view.

Object of the invention

The object of the invention is to overcome the above-mentioned problem and make an absorbent product which will be discreet even when used with string

10 briefs.

Short description of the invention

A product of the type described in the introduction, with which the problem associated with previously known similar products has been for the most part

15 avoided, is according to the invention characterized in that the width of the second end portion of the product is 40 mm maximum, and in that the long sides of this end portion are essentially arcuate.

According to a preferred embodiment, the width of the second end portion is

20 between 15 and 40 mm. According to another preferred embodiment, the width of the second end portion is 18-30 mm.

To be suitable for use with string briefs with open-work front, the product length is advantageously 150 mm or less.

25

Description of the invention

According to the invention, the above-mentioned problem will be solved by making the absorbent product with one portion so arranged that the product will not be visible from the outside when used with a pair of string briefs.

30

Surprisingly it has been shown that the crutch width is fairly similar on most string briefs. Measurements show that a product width not exceeding 40 mm is sufficiently narrow to be concealed by the briefs.

5

The width will preferably lie between 15 and 40 mm.

As mentioned earlier, the absorption capacity would not normally be sufficient in the case of a product with such small width, where the width does not vary. It is therefore important for the absorbent product to follow the edge of the briefs so that the available absorption surface will be as large as possible.

A product which is as wide as possible is also important from the leakage point of view. The risk of leakage from the side of the briefs, as well as soiling of the briefs, is reduced if the product shape follows that of the briefs. The absorbent product according to the invention therefore has, at least in part, arcuate long sides which follow the shape of the briefs in the crutch area. The long sides of the product do not need to have a smooth arc shape, but it is sufficient that the long sides be essentially arcuate. When we say that the long sides should be essentially arcuate, they could for example also be undulated but where the undulations essentially follow an arc. Other forms for the long sides of the product are of course also possible as long as the longitudinal side edges of the product have essentially arc shape.

Studies of the crutch section of string briefs show that certain designs of the arc shape on the long sides of the product are particularly favourable. This favourable shape can be expressed in that the radius of curvature of an imagined circle which includes one of the long sides of the product lies within certain determined values. This assumes that the arc can be inscribed in a circle, but a suitable arc shape could also be inscribed in an ellipse. One way of

specifying a suitable art shape, which would be valid irrespective of which geometrical figure could incorporate the arc, is to express an angle formed by virtue of the long side of the product being curved. The angle is calculated as

5 that formed by a line running in the transverse direction and tangent to the shortest short side of the product, and a line which intersects or touches one of the long sides of the product at the points where the arc either changes direction or turns into a short side. The value of the angle so formed should lie within certain predetermined limits. The most favourable angle lies between 95° and

10 110° ; see below for a detailed description of the measurement method.

It has been found that it is not necessary for the whole product to be of a determined, very narrow width since the front part of most string briefs on the market is wide enough to accommodate a product of normal width with the long

15 sides of fairly arbitrary shape. This means then that the part of the product which is worn at the front can be designed more freely, according to the absorption capacity requirements which may exist.

It follows then that only one of the end portions - that portion worn at the rear

20 and fitting into the narrow part of the string briefs - needs to be made with a maximum width and a special contour on the long sides. This part lengthwise in the product is referred to below as the rear or second end portion. That part lengthwise in the product which can be designed with a greater degree of freedom will be referred to as the front or first end portion. The two end portions

25 do not necessarily split the product into two parts of equal length. The first end portion is suitably 60 - 170 mm long, whilst the second end portion is suitably 30 - 90 mm long. The complete length of the product lies between 140 and 260 mm.

Short description of the figures

The invention will be described below in more detail with reference to the exemplary embodiments shown on the drawings.

5

Fig. 1 shows a plan view of a sanitary towel according to the invention.

Fig. 2 shows a section along line II-II through the sanitary towel in Fig. 1.

Fig. 3 shows a plan view of protection for briefs according to the invention.

Fig. 4 shows a section along line IV-IV through the protection for briefs in Fig.

10 3.

Fig. 5 shows protection for briefs according to an alternative embodiment of the invention, viewed from below.

Fig. 6 shows a part of a product for protection of briefs according to an alternative embodiment of the invention.

15 Fig. 7 shows how the extent of the curvature on the long sides of the product can be indicated.

Detailed description of figures and embodiments

20 Fig. 1 and 2 show a sanitary towel 1 according to one embodiment of the invention.

Sanitary towel 1 has a basically elongate shape with a longitudinal direction and a transverse direction. It has two long sides 2 and 3, two short sides 4 and 5, a first 6 and a second 7 end portion, a longitudinal centre line 8 extending over the
25 product length and a transverse centre line 9 running laterally over the product width. The longitudinal centre line is considered to be a line extending in the longitudinal direction of the sanitary towel equidistant from the long sides of the product. In the same way, the transverse centre line is a line arranged in the transverse direction of the towel, equidistant between the short sides of the

towel. Towel 1 has an upper side 10, intended to be turned towards the wearer during use, and a lower side 11 to be turned away from the wearer during use.

- 5 Sanitary towel 1 incorporates a liquid-permeable outer layer 12 fixed on the side of the product to be turned towards the wearer (upper side 10) during use, and an impermeable rear layer 13 on the side of the towel which will be turned away from the wearer (lower side 11) during use. Between the outer layer 12 and the impermeable rear layer 13 is an absorption body 14. The outer layer and the rear
10 layer are connected at a joint outside the absorption body.

Fig. 2 shows a section through the towel 1 in Fig. 1 along line II-II. On the lower side 11 of the towel, on its impermeable layer 13, are placed the fasteners in the form of strips 15 made of pressure-sensitive adhesive arranged parallel with the
15 longitudinal centre line 8 of the towel. A removable protective layer 16 is laid on top of adhesive 15. Protective layer 16 is removed by the wearer before the towel is placed in the underwear. Other fastening methods can of course be used, such as Velcro® or friction-fastening.

- 20 Outer material 12 could be of any conventional material, for example non-woven, perforated plastic film or a laminate of these two materials.

The most suitable material for the absorption body 14 is cellulose pulp. This can be made available as rolls, bales or sheets which, for the production of sanitary
25 towels, are dry-defibred and converted in fluffed form to a pulp matting, sometimes with an admixture of "superabsorbents" which are polymers with the power to absorb several times their own weight of water or body fluids. One alternative to this is to dry-form pulp matting as described in WO 94/10956. Examples of other usable absorption materials are various types of natural fibre
30 such as cotton fibre, peat or similar. It is of course possible to use absorbent

synthetic fibres, or mixtures of natural and synthetic fibres. Absorption body 14 can also include other materials such as form stabilizers, fluid-spreading means, or binders such as thermoplastic fibres which have been heat-treated to combine
5 short fibres and particles into a continuous material. Various types of absorbent foam material can also be used in the absorption body.

The impermeable layer 13 (rear layer) consists of a liquid-impermeable material. Thin, fluid-tight plastic films are suitable for this purpose, but it is also possible
10 to use material which is naturally permeable, but which is provided with a coating of plastic, resin or other fluid-tight material. In this way leakage of fluid from the lower side of the absorbent product is prevented. The impermeable layer 13 can therefore be made of any material which fulfills the impermeability criterion and offers sufficient flexibility and skin tolerance for this purpose.
15 Examples of material suitable for use as an impermeable layer are plastic films, non-woven and laminates of these two. Plastic films can for instance be of polyethylene, polypropylene or polyester. The impermeable layer can alternatively consist of a laminate of an impermeable plastic layer, turned towards the absorption body, and a non-woven layer turned towards the
20 underwear of the wearer. This type of construction provides a leakage-safe barrier layer with textile feel.

Between the outer layer 12 and the absorption body 14 is an acquisition layer 17. The purpose of this layer 17 is to draw fluid into the towel and transmit it
25 down to absorption body 14. This acquisition layer 17 can for example be a non-woven material of low density.

It can be seen from Fig. 1 that the long sides 2 and 3 of the sanitary towel are essentially arcuate. The arc shape is designed so that these long sides 2, 3 curve
30 inwards towards the longitudinal centre line 8. The first end portion 6 has a

width of 65 mm at its widest part. The widest part of the second end portion 7 is 30 mm.

- 5 Fig. 3 and 4 show a product 18 for protection of briefs according to one embodiment of the invention. There is an outer layer 12, a barrier layer 13 and an absorption body 14. The absorption body can be an "airlaid", i.e. an airlaid cellulose body. The outer layer 12 and barrier layer 13 can be constructed of the same material as described for the same layers 12 and 13 of the sanitary towel
10 shown in Fig. 1 - 2.

Fig. 4 shows a section along line IV-IV through the protection for briefs in Fig. 3. On the lower side 11 of this product, on its impermeable layer 13, is a fastener in the form of a layer 15', of pressure-sensitive adhesive covering the
15 whole surface. Over this adhesive layer 15', is a removable protective layer 16 which will be removed by the wearer before the product is placed in the underwear. Other fixing methods such as Velcro® or friction-fastening can of course be used.

- 20 It can be seen from Fig. 3 that the outer contour of the protection for briefs is similar to that of the sanitary towel 1 shown in Fig. 1. The first end portion 6 has a maximum width of 60 mm, whilst the maximum width of the second end portion 7 is 22 mm.

- 25 Fig. 5 shows a product for protection of briefs according to an alternative embodiment of the invention. What distinguishes this product from that described in Fig. 3-4 is that the pressure-sensitive adhesive is applied in a different way and that the liquid-impermeable rear layer 13 can breathe. Such a breathable rear layer 13 can be SMS (spunbond-meltblown-spunbond) or a

breathable plastic film consisting of, for example, polyethylene. This type of breathable film is described in, for example, EP 283 200. In order to retain its breathable quality when applied on a product, the lower side 11 may not be covered completely by the adhesive layer. The adhesive is therefore applied in three areas 15a, 15b and 15c. Strip 15a is laid along the longitudinal centre line 8 of the product and extends from the narrowest short side 5 over the whole length of the product. Adhesive strips 15b and 15c are arranged parallel with adhesive strip 15a, on each side of the longitudinal centre line 8, at a distance from the long sides in the first end portion 6. The adhesive strips 15a, 15b and 15c are about 10 mm wide positioned about 11 mm apart. Strip 15a is placed about 6 mm from each of the long sides 2 and 3. This is to provide more comfort for the wearer by reducing the risk of the adhesive sticking to the body hair. Strips 15b and 15c lie within the first, front end portion 6 of the product. Where the product is at its widest, the adhesive strips 15b, 15c do not reach as far as the side edges 2, 3 of the product, which they do where the product narrows closer to its transverse centre line 9.

Fig. 6 shows an alternative embodiment of the protection for briefs where the long sides 2 and 3 have an undulated form, but are essentially arcuate.

Fig. 7 shows a part of an absorbent product according to the invention. The figure shows how it is possible to specify a favorable arc shape of the long sides 2 and 3 of the product in the second end portion 7. A line X running in the transverse direction of the article is drawn at a tangent to the short side 5 situated in the second end portion of the product. At a distance $L = 80$ mm from line X, a line B is drawn parallel with X. It is those parts of the product lying between lines X and B which form basis for the measurement of the arc shape. Long side 2 intersects line B at point P. Side 2 stops curving away from longitudinal centre line 8 when it approaches the second short side 5. When it is very close thereto,

e.g. less than a few millimetres, it curves towards longitudinal centre line 8.

That point where the curvature changes direction is called Q. A line N is then drawn between points P and Q. The angle formed between lines X and N is

5 called angle v . For a favorable curvature of long sides 2 and 3, $v = 95-110^\circ$.

The long side does not need to change curvature, but can run with the same direction of curvature down to its intersection with short side 5. This intersection then forms point Q. Short side 5 can be completely straight, and line X will then

10 coincide with the short side.

The invention is not to be considered as being limited to the above-mentioned embodiments. They are intended only to clarify the invention.

15 Characteristics of various embodiments can be combined with one another within the scope of the invention. For example, the various adhesive patterns in the different embodiments can of course be combined with other alternative features of the other embodiments.

Amended claims (PCT/SE99/02086)

1. An absorbent product such as a sanitary towel, incontinence protection or protection for briefs, which product (1; 18) has an elongate shape with a longitudinal direction (8) and a transverse direction (9), an upper side (10) and a lower side (11), and has a first end portion (6) intended to face forwards on the wearer and a second end portion (7) intended to face backwards on the wearer, and wherein the first end portion (6) has greater width than the second end portion (7) and the width of the second end portion (7) of the product is 40 mm maximum, characterised in that the long sides (2, 3) of this end portion (7) are essentially arcuate and curved inwards towards the longitudinal centre line (8) of the product; and in that the angle (ν) between an end line (X), which runs in the transverse direction of the product and tangent to the edge (5) of its second end portion (7), and a side line (N), drawn between a first point (P), which forms the intersection between one long side (2) of the product and a straight line (B) running in the transverse direction of the product at a distance of 80 mm from said end line (X), and a second point (Q) at the point where the curvature of said long side (2) changes direction near said end edge (5) or with unchanged curvature direction intersects end edge (5), lies between 95° and 110°.

2. Absorbent product according to Claim 1, characterised in that the width of the second end portion (7) is 20-40 mm.

3. Absorbent product according to Claim 1, characterised in that the width of the second end portion (7) is 20-30 mm.

4. Absorbent product according to any one of Claims 1-3, characterised in that the length of the product (1; 18) is 150 mm or smaller.

5. Absorbent product according to any one of Claims 1-4, characterised in that the lower side (11) of the product is fitted with fastening means (15; 15a, 15b, 15c),

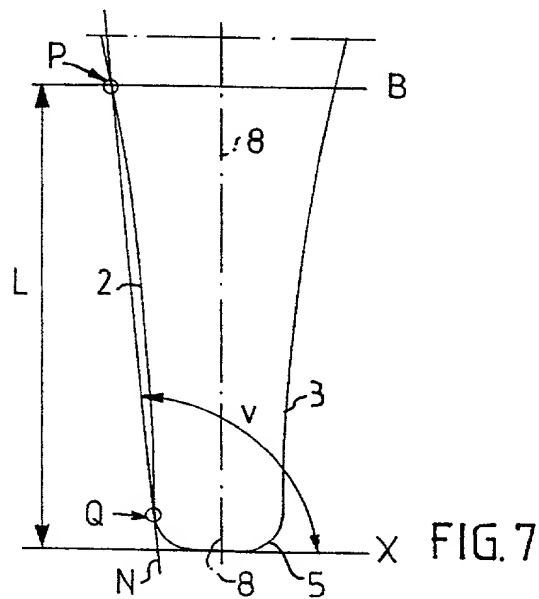
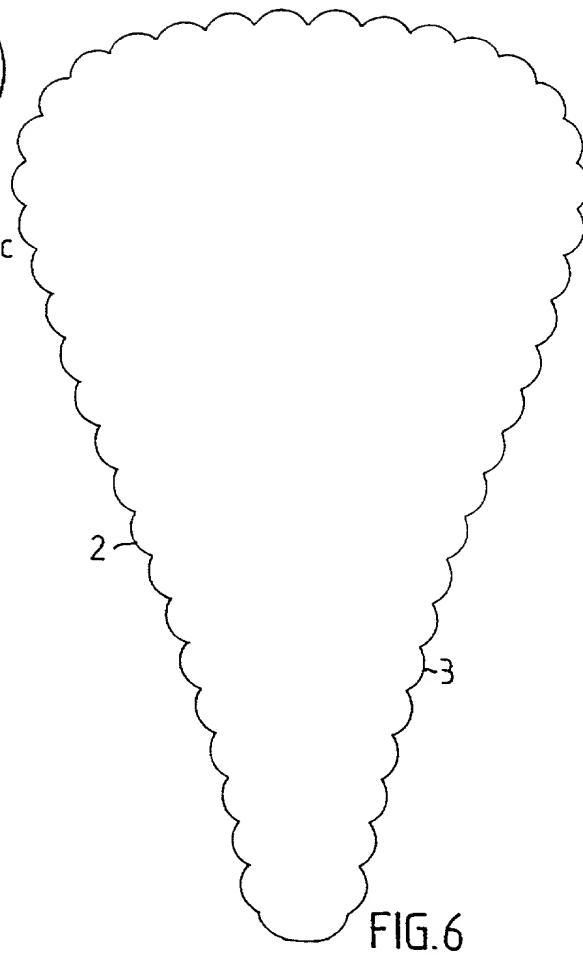
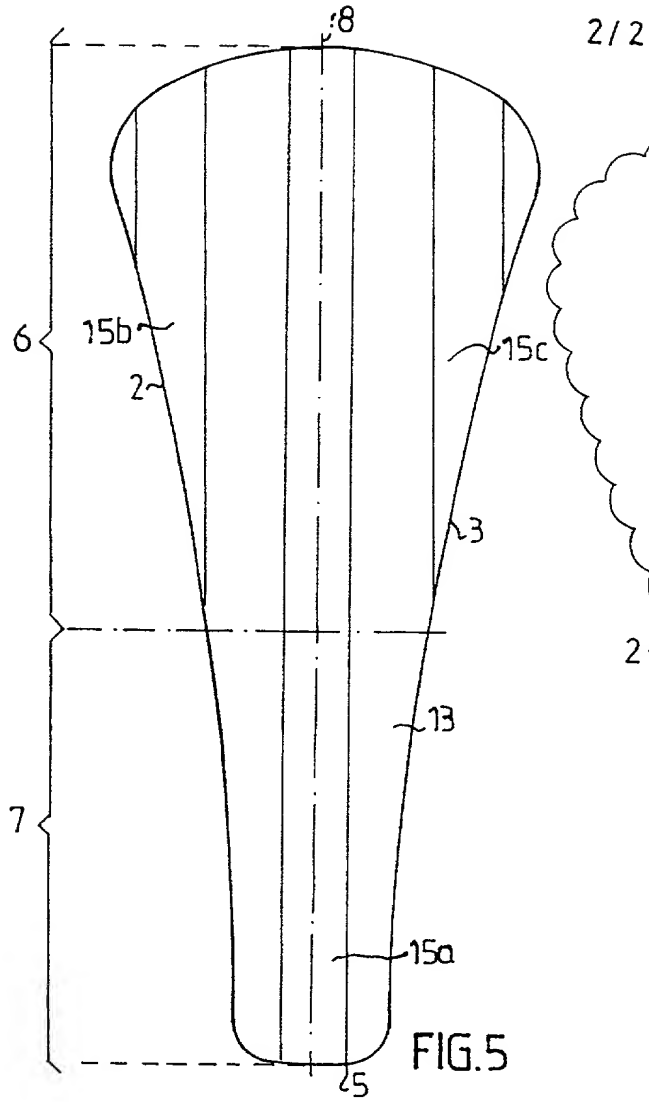
31-10-2000

- 2 -

which extend in a strip-shaped manner in the longitudinal direction of the product parallel with its longitudinal centre line (8).

6. Absorbent product according to Claim 5, characterised in that the product has three fastening strips, comprising a central fastening strip (15a), which extends along the longitudinal centre line (8) over essentially the entire length of the product, and two further fastening strips (15b, 15c) which are arranged one on each side thereof and at a distance therefrom and the extent of which lies within the first, front end portion (6) of the product.

31-10-2000 17:20 08_59887300 +49 89 33004405 SE 009902086



COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

ABSORBENT PRODUCT WITH ARCUATE LONGSIDES OF END PORTION

the specification of which: *(check one)*

REGULAR OR DESIGN APPLICATION

☐ is attached hereto.

☐ was filed on _____ as application Serial No. _____ and was amended on (if applicable).

PCT FILED APPLICATION ENTERING NATIONAL STAGE

☒ was described and claimed in International application PCT/SE99/02086 filed on 15 November 1999 and as amended on (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

PRIORITY CLAIM

☒ I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

PRIOR FOREIGN APPLICATION(S)

Country	Application Number	Date of Filing (day, month, year)	Priority Claimed
Sweden	9803981-1	20 November 1998	yes

(Complete this part only if this is a continuing application.)

I hereby claim the benefit under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)

(Filing Date)

(Status--patented, pending, abandoned)

POWER OF ATTORNEY

The undersigned hereby authorizes the U.S. attorney or agent named herein to accept and follow instructions from **Albihns Stockholm AB** as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorney or agent named herein will be so notified by the undersigned.

As a named inventor, I hereby appoint the registered patent attorneys represented by Customer No. **000466** to prosecute this application and transact all business in the Patent and Trademark Office connected therewith, including: **Robert J. PATCH, Reg. No. 17,355, Andrew J. PATCH, Reg. No. 32,925, Robert F. HARGEST, Reg. No. 25,590, Benoît CASTEL, Reg. No. 35,041, Eric JENSEN, Reg. No. 37,855, Thomas W. PERKINS, Reg. No. 33,027, and Roland E. LONG, Jr., Reg. No. 41,949,**

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00466

PATENT TRADEMARK OFFICE

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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